INTEL Docket No.: P17683

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WHAT IS CLAIMED IS:

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1. An apparatus comprising:

a first device to receive a first signal representing a first supply voltage value associated with a first supply current value, and representing a second supply voltage value associated with a second supply current value.

- 2. An apparatus according to Claim 1, wherein the first signal represents an impedance value.
- 3. An apparatus according to Claim 1, the first device to adjust a supply voltage to a value based at least in part on the first signal.
 - 4. An apparatus according to Claim 3, the first device comprising:
 - a voltage regulator converter to generate the supply voltage; and
- a voltage regulator controller to receive the first signal and to transmit a control signal to the voltage regulator converter, the control signal to control the value of the supply voltage.
 - 5. An apparatus according to Claim 3, further comprising:
- a second device to transmit the first signal and to receive the supply voltage.
 - 6. An apparatus according to Claim 5, wherein the second device comprises an integrated circuit.

7. An apparatus according to Claim 3, wherein the supply voltage is associated with a supply current, wherein the first supply voltage value and the first supply current value define a first coordinate of a voltage vs. current coordinate system, wherein the second supply voltage value and the second supply current value define a second coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the second coordinate define a line, wherein the value of the supply voltage and a value of the supply current define a third coordinate, and wherein the line substantially comprises the third coordinate.

- 8. An apparatus according to Claim 1, wherein the first signal represents a slope of a power supply load line.
 - 9. An apparatus comprising:

a first device to transmit a first signal representing a first supply voltage value associated with a first supply current value, and representing a second supply voltage value associated with a second supply current value.

- 10. An apparatus according to Claim 9, wherein the first signal represents an impedance value.
- 20 11. An apparatus according to Claim 9, wherein the first signal represents a slope of a power supply load line.
 - 12. An apparatus according to Claim 9, the first device to receive a supply voltage having a value based at least in part on the first signal.

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13. An apparatus according to Claim 12, wherein the supply voltage is associated with a supply current, wherein the first supply voltage value and the first supply current value define a first coordinate of a voltage vs. current coordinate system, wherein the second supply voltage value and the second supply current value define a second coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the second coordinate define a line, wherein the value of the supply voltage and a value of the supply current define a third coordinate, and wherein the line substantially comprises the third coordinate.

- 14. An apparatus according to Claim 13, the first device to transmit the first signal to a second device and to receive the supply voltage from the second device.
 - 15. An apparatus according to Claim 9, wherein the second device comprises an integrated circuit.
- 15 16. A method comprising:

receiving a first signal representing a first supply voltage value associated with a first supply current value, and representing a second supply voltage value associated with a second supply current value.

- 20 17. A method according to Claim 16, wherein the first signal represents an impedance value.
 - 18. A method according to Claim 16, further comprising: adjusting a supply voltage to a value based at least in part on the first signal.

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19. A method according to Claim 18, wherein generating the supply voltage signal comprises:

receiving the first signal;

determining the value of the supply voltage based at least in part on the first signal; and

transmitting a control signal to control a voltage regulator converter to generate the supply voltage.

- 20. A method according to Claim 18, wherein the supply voltage is associated with a supply current, wherein the first supply voltage value and the first supply current value define a first coordinate of a voltage vs. current coordinate system, wherein the second supply voltage value and the second supply current value define a second coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the second coordinate define a line, wherein the value of the supply voltage and a value of the supply current define a third coordinate, and wherein the line substantially comprises the third coordinate.
 - 21. A method according to Claim 16, wherein the first signal represents a slope of a power supply load line.
- 20 22. A method according to Claim 16, further comprising:

adjusting a supply voltage having a value based at least in part on the first signal; and receiving a second signal representing a third supply voltage value associated with the first supply current value, and representing a fourth supply voltage value associated with the second supply current value.

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23. A method according to Claim 22, wherein the second signal represents a second impedance value.

- 24. A method according to Claim 22, wherein the second signal represents a slope of
 a second power supply load line.
 - 25. A method according to Claim 22, further comprising:

adjusting the supply voltage to a second value based at least in part on the second signal.

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- 26. A method according to Claim 25, wherein the second supply voltage is associated with a second supply current, wherein the third supply voltage value and the first supply current value define a first coordinate of a voltage vs. current coordinate system, wherein the fourth supply voltage value and the second supply current value define a second coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the second coordinate define a line, wherein the value of the second supply voltage and a value of the second supply current define a third coordinate, and wherein the line substantially comprises the third coordinate.
- 20 27. A method comprising:

transmitting a first signal representing a first supply voltage value associated with a first supply current value, and representing a second supply voltage value associated with a second supply current value.

28. A method according to Claim 27, wherein the first signal represents an impedance value.

29. A method according to Claim 27, wherein the first signal represents a slope of a power supply load line.

- 5 30. A method according to Claim 27, further comprising: receiving a supply voltage having a value based at least in part on the first signal.
- 31. A method according to Claim 30, wherein the supply voltage is associated with a supply current, wherein the first supply voltage value and the first supply current value define a first coordinate of a voltage vs. current coordinate system, wherein the second supply voltage value and the second supply current value define a second coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the second coordinate define a line, wherein the value of the supply voltage and a value of the supply current define a third coordinate, and wherein the line substantially comprises the third coordinate.

32. A method according to Claim 30, wherein transmitting the

- 32. A method according to Claim 30, wherein transmitting the first signal comprises transmitting the first signal to a first device, and wherein receiving the supply voltage comprises receiving the supply voltage from the first device.
- 20 33. A system comprising:

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a microprocessor to transmit a first signal representing a first supply voltage value associated with a first supply current value, and representing a second supply voltage value associated with a second supply current value;

a voltage regulator to receive the first signal; and

a double data rate memory electrically coupled to the microprocessor.

34. A system according to Claim 33, wherein the first signal represents an impedance value.

- 35. A system according to Claim 33, wherein the first signal represents a slope of apower supply load line.
 - 36. A system according to Claim 33, the voltage regulator to adjust a supply voltage to a value based at least in part on the first signal.
- 37. A system according to Claim 36, the voltage regulator comprising:
 a voltage regulator converter to generate the supply voltage; and
 a voltage regulator controller to receive the first signal and to transmit a control signal to the voltage regulator converter, the control signal to control the value of the supply voltage.

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38. A system according to Claim 36, wherein the supply voltage is associated with a supply current, wherein the first supply voltage value and the first supply current value define a first coordinate of a voltage vs. current coordinate system, wherein the second supply voltage value and the second supply current value define a second coordinate of the voltage vs. current coordinate system, wherein the first coordinate and the second coordinate define a line, wherein the value of the supply voltage and a value of the supply current define a third coordinate, and wherein the line substantially comprises the third coordinate.